

# PATENT SPECIFICATION



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## COMPLETE SPECIFICATION.

### Appliance for Teaching Music.

I, CARLO FANELLA, of 57, Corso Federico II, Aquila, Italy, a subject of the King of Italy, do hereby declare the nature of this invention and in what manner the same is to be performed, to be particularly described and ascertained in and by the following statement:

The invention relates to musical appliances by which immediately to find tonalities and provide an indication of several hundreds of exercises and scales without daily consultation of sheets of music of the kind in which discs bearing suitable indications are mounted behind apertures in casings.

According to the present invention the appliance is characterised by a musical synoptical table, an indicator superposed thereon serving to point out the clef tonality—major or minor—the initial note of the exercise to be fixed with precision on said synoptical table, and by indication placed between the openings this indication, when completed with the other particulars written on the discs, as distances intervals of scales and similar indications for the arpeggios, serving exactly to show the exercise to be determined and performed.

An embodiment of the invention is illustrated in the accompanying drawings in which Fig. 1 shows an elevation of the appliance adapted for singing and musical instruments in general. Figs. 2 and 3 are cross sections on the line I-II and III-III, Fig. 4 is a longitudinal section on the line IV-IV; Fig. 5 is an elevation of the rotatable discs seen from the internal upper side of the device; Fig. 6 shows the appliance associated with the music desk of the piano; Fig. 7 illustrates to a larger scale the rotatable discs seen from the front side with the indication of the exercises; Fig. 8 illustrates the disposition of the note tonalities, small pinions being provided

for the fingers to rotate the discs by means of worms from the front side of the discs; Fig. 9 is a longitudinal section on line V-V of Figs. 7 and 8; Figs. 10 and 11 illustrate the practical application of the device.

On the back of the appliance and rotatable about pivots 2-21-21<sub>1</sub>-21<sub>1</sub> discs 4, 5, 6, 7, are disposed within corresponding recesses as illustrated in Figs. 5 & 7. The front side of the casing 3 is provided with openings 12, 13, 14, 15 protected by a glass or transparent celluloid.

On the glass or celluloid there is a frame serving as a guide for a longitudinally sliding index 10 having inside a second slide 11 which may be transversely displaced.

The discs may be rotated from the upper side of the table or if desired from the bottom either from the outer side of the appliance, where they project as illustrated in Fig. 1 or from the face by means of pinions as shown in Fig. 8 the discs bearing besides the word "stop" the following legends:

Disc 4. Opposite or contrary movement—harmonic—melodic—mixed—in thirds—in octaves—chromatic—an arrow.

Disc 5. Octave—third—sixth—tenth—an arrow.

Disc 6. Perfect or common major—perfect minor—dominant seventh—diminished seventh—ninth.

Disc 7. Fundamental or root position—first inversion—second inversion—third inversion—fourth inversion.

On the front face 8 there are traced two or more musical staves in treble, bass clef or the like. The number of staves and the indication of the clef and exercises is of course variable and adapted to the music to be pointed to and the instrument for which said music is desired.

Said staves are divided into sixteen

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5  
bars in each bar the sharps and flats  
are progressively indicated and arranged  
with the notes of the corresponding  
tonalities the major keys being in the  
upper part and the minor keys in the  
lower part of the table.

In the intermediate space of the table  
and between the openings there is the  
indication of the scale or arpeggio to be  
performed, namely; scale . . . at the  
distance of . . . tone or key of  
arpeggio on the chord of . . . on  
tone or key of\* the asterisk indicating  
the note and bar of the musical  
table which is going to be fixed by the  
index.

The appliance above specified as  
generally constructed for the piano will  
be an integral part of the stand or desk  
as illustrated in Fig. 6, but it may be  
also hooked to the centre of the stand,  
and hidden with the same inside the case  
of the piano as illustrated in Figs. 10  
a, b, c. In the case of other instruments  
the appliance is hooked to their indepen-  
dent stand.

The appliance according to the invention  
may be constructed of any materials,  
common or high quality, as aluminium,  
ebonite, celluloid, ivory, mother-of-pearl  
and so on and in whatever dimensions  
desired.

#### USE AND OPERATION.

1. To find the tonalities, which are  
nearly always forgotten, once the appli-  
ance has been set as above mentioned,  
it will be sufficient simply to look at the  
table on which they are progressively dis-  
posed; the major in the upper part, the  
corresponding minor in the lower part.

2. For the indication of musical scales  
the index 10 is to be moved and stopped  
on a division or bar of the table, where-  
upon the internal slide 11 is displaced  
so as to uncover the upper or lower part  
of the staffs, then the two discs on the  
left side 4 and 5 are rotated so as to fix  
the fundamental note on the table and  
the tone, the distance and the like in  
the openings 12 and 13 of the appliance.

#### EXAMPLE.

Suppose scale of C sharp major to be  
performed at the distance of an octave.

By displacing the index the funda-  
mental note C sharp major is uncovered,  
then the first disc is turned so that the  
arrow may appear in the corresponding  
opening, then the second disc is turned  
till the word "octave" appears. The  
scale may then be performed according  
to the indications and in the same way  
the following scales may be indicated.

Major and minor scales at the distance of an octave, third, sixth, tenth	N.120	65
Id. in thirds	N.120	
Id. in octaves	N.120	
Minor scales, harmonic, melodic mixed, at distance of an octave	N. 45	
Id. for contrary movement in major and minor tone	N. 30	70
Id. chromatic at a distance of an octave, third, sixth, tenth	N., 4	
Total	N.439	

The arrow on the first disc is to be  
used only for the major and minor tones,  
which are already indicated by the table;  
it would be of no use to have a double  
indication. The arrow on the second  
disc is to be used only when performing  
scales in opposite movement.

3. For the performance of arpeggios  
the preceding discs are covered with the  
word "stop" and by means of the index  
and discs 6 and 7 the key, chord and  
position of the arpeggio desired are fixed.

EXAMPLE.  
Suppose it is desired to perform  
arpeggio of the common major chord in  
key C on the fundamental note. The  
index is moved so as to expose C major,  
the third disc is turned to "perfect  
major" and fourth to the "fundamental  
note". According to these indications  
the arpeggio is performed and likewise  
all the other arpeggios are executed;

Arpeggios of the common major chord  
in key C on the fundamental and I and  
II inversions N. 3  
Id. minor on the fund. and I, II N. 3  
Id. of seventh dominant on the  
fund. and I-II-III inversions N. 4  
Id. of seventh diminished N. 4  
Id. of ninth on the fund. and  
I-II-III-IV inversions N. 5  
N.19 105

and each for the tonalities in the table  
that is a total of  $30 \times 19 = 570$  arpeggios.

In short the appliance according to the  
invention is provided with a synoptical  
table for the indication of tonalities and  
shows the fundamental note the tonality  
and distance of 439 musical scales, more-  
over the fundamental note the tonality  
and inversions of 570 arpeggios for a total  
of more than a thousand of the principal  
musical exercises which in general are  
neglected when not entirely forgotten.  
It is clear that by conveniently modifying  
the legends of the discs the number and  
species of exercises may be varied  
at will. The appliance being in sight

of the pupil improving his musical memory, represents a invitation to the execution of a determined group of progressive exercises and serves at the same time for a pleasant technical exercise of the fingers while the daily consideration of musical sheets is avoided.

Having now particularly described and ascertained the nature of my said invention and in what manner the same is to be performed, I declare that what I claim is :—

1. A musical appliance for assistance in learning and performing exercises comprising a casing provided with openings and internal rotatable discs bearing legends to be visible through said openings, characterised by a musical synoptical table, an indicator superposed thereon serving to point out the clef, tonality—major or minor—the initial note of the exercise to be fixed with precision on said synoptical table, and by indication placed between the openings 25 this indication, when completed with the other particulars written on the discs, as distances, intervals of scales and similar indications for the arpeggios, serving exactly to show the exercise to be determined and performed.

2. A musical appliance as claimed in Claim 1 characterised in that the indi-

cator is slideable along the front and openings in combination with a second inner slide running transversely of the 35 direction of the other.

3. A musical appliance as claimed in Claim 1 characterised in that the internal discs project beyond the upper or lower part of the casing (Fig. 1), to be rotated 40 by hand or by gears as in the modification illustrated in Fig. 7.

4. A musical appliance as claimed in Claim 1 characterised by the combination of the musical synoptical table with the 45 indicator slide and internal discs for the determination of each exercise to be performed.

5. A musical appliance as claimed in Claims 1 and 2 characterised in that it 60 may also form an integral part of the inner stand of the piano case.

6. A musical appliance for assistance in learning and performing exercises constructed and arranged substantially as 65 described with reference to the accompanying drawing.

Dated this 19th day of August, 1925.

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Agents for the Applicant.

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*[This Drawing is a reproduction of the Original on a reduced scale.]*

Fig. 1

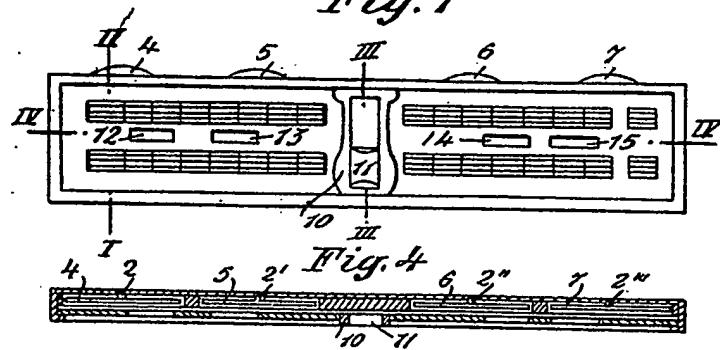


Fig. 5

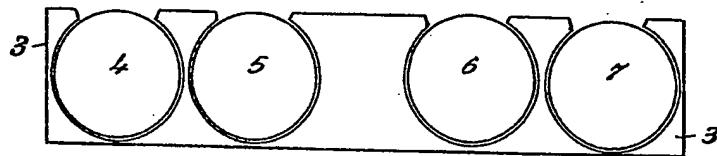


Fig. 6

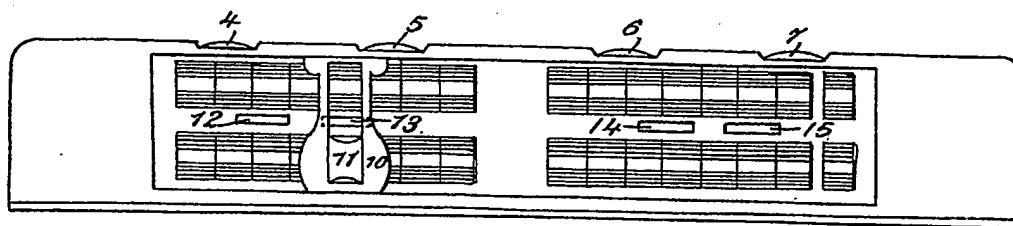


Fig. 7

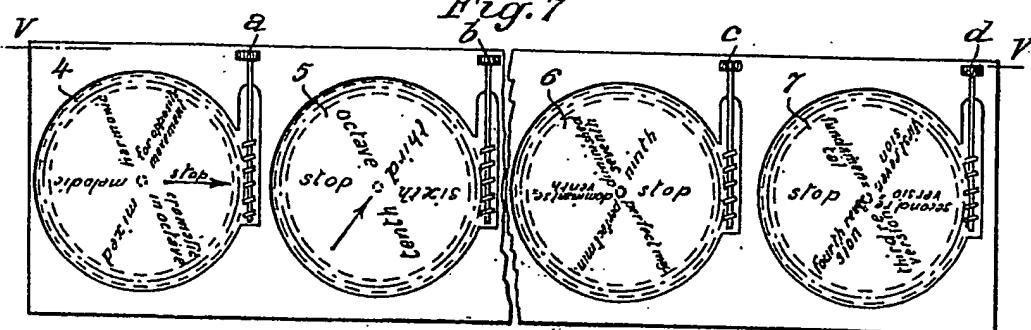


Fig. 8

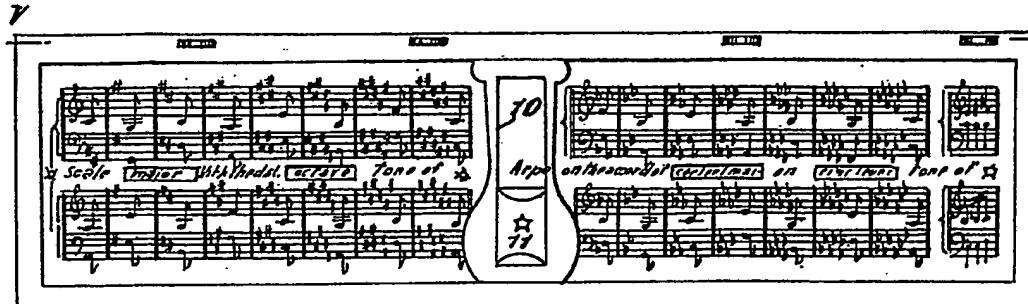


Fig. 9

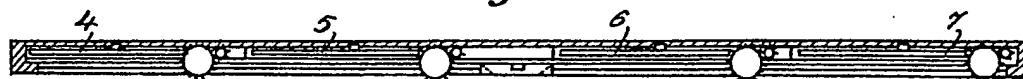


Fig. 10

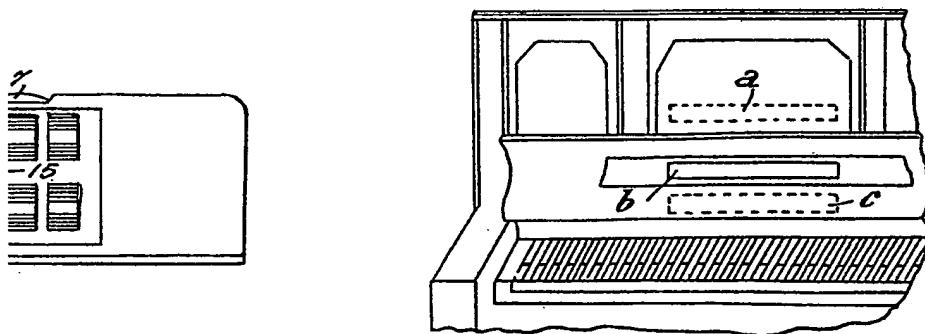


Fig. 11

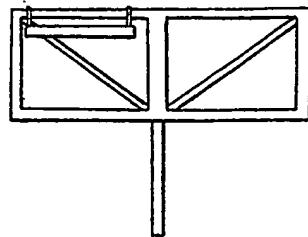
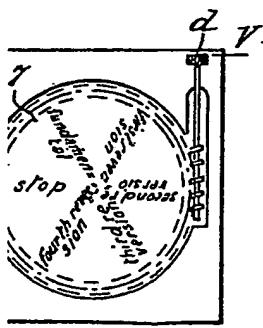
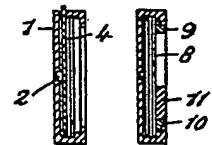
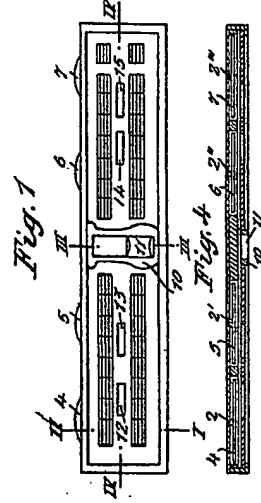


Fig. 2 Fig. 3





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